STATION 1

Applying lampricide to areas where there are a lot of young juvenile Sea Lamprey has been a very successful control method.

A. What hazards or dangers could there be when using a chemical like the lampricides in the environment? List two.

B. List one way that you think scientists could test possible hazards.

STATION 2

Look at the graph showing Sea Lamprey numbers in Lake Erie and Lake Huron.

A. Are Sea Lamprey numbers in these lakes above or below the target numbers for control?

B. Which lake looks like it had a big increase in Sea Lamprey about 15 years ago?

C. How many Lamprey are currently in each lake (as of 2016?)

STATION 3

Sea Lamprey spawn in areas with the following conditions:

- **Stream velocity: 0.5—1.5 m/s (meters per second).**
- **Bottom Substrate: gravel greater than 9mm in diameter (>9mm).**
- **No plants**

Would Location A, B, or C be best to target spawning Lamprey?

STATION 4

Many Sea Lamprey traps and barriers are located where artificial dams have been made. However, many dams are being removed in Michigan's waterways, because they block native fish and other aquatic animals from natural migrations. If the dams are removed, the Lamprey barriers are removed.

A. Which do you think is more important—blocking Sea Lamprey or allowing native species to migrate? Discuss with your group.

B. How could scientists block Sea Lamprey, but also allow other fish to migrate past the Lamprey trap?

STATION 5

Observe the live Sea Lamprey in the aquarium.

Their gills are different from most other fish gills.

A. How many gill openings (holes) do you see behind their eye?

B. Watch the gills closely—are the gills moving at all?

C. Look at the circular rows of teeth and their mouth. Can you see their tongue?

D. Lamprey release scents to communicate messages. Find their nose—a "hole" that is on top of their head.

STATION 6

Look at the graph at the bottom of the brochure, titled "A Success Story." It shows Sea Lamprey and Lake Trout numbers in Lake Superior.

A. What year were Sea Lamprey discovered in Lake Superior?

B. What year did the first lampricide treatments begin?

C. What happened to Lake Trout numbers after Sea Lamprey lampricide treatments began?

STATION 7

Read page 19 in the Sea Lamprey booklet.

A.What are some jobs that people with aquatic science careers could have?

B. How can you help in the battle against Sea Lamprey?

STATION 8

Look at the large poster showing other aquatic invasive species in the Great Lakes region.

A.List the names of three invasive species.

B. Choose one and describe how it is invasive (what does it do?)

Location A: St. Clair River at Port Huron

Velocity: 1.3 m/s

Bottom substrate: gravel size 9-15mm

No plants

Location B: Detroit River at Fort Wayne

Velocity: 0.9 m/s

Bottom substrate: gravel size 5-8mm

Some plant growth

Location C: Lake Erie

Velocity: LOW

Bottom substrate: silty muck

Heavy plant growth